

July 20, 2016 8:34:09 AM

Item ID: DSI 9410-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Amends Installation of D350-591-311/-312 Steps

Stop *NS2*

Start Date: 7/20/2016 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 7/22/2016 **Req'd Qty:** 2.00 ***3***

Customer:

Reference:

Approvals: Process Plan: SVP Date: 7/20/16 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 149169

149169

Page 2

July 20, 2016 8:34:10 AM

Item ID: DSI 9410-011 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Amends Installation of D350-591-311/-312 Steps
 Start Date: 7/20/2016 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 7/22/2016 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Packaging	Memo	0.00				2x DAS 28 9-89	DAS 27 9-89	JUL 27 2016	
Packaging	Identify and pack for shipping as per PPP DSI 9410-011 Location: FG123 PPP rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.03					DAS 21 9-89	JUL 27 2016	
Quality Control									
							DAS 21 9-89	JUL 27 2016	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Picklist Print

July 20, 2016 8:34:14 AM

Page 1

Work Order ID: 149169

149169

Parent Item: DSI 9410-011

DSI 9410-011

Parent Item Name: Amends Installation of D350-591-311/-312 Steps

Start Date: 7/20/2016

Required Date: 7/22/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: New issue DD verified by:EC IPP rev:B as per dwg RevB
DD 10.03.03 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN4-15A		Purchased		No		110	Each	282.0000	8	16			
AN4-15A									**				
Bolt													
					<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>			DAS 8 9-89	DAS 27 9-89

DAS
28
9-89

GA	26	
120449	26	
over003	256	
m134955	150	
m135127	106	

16

D2732-030		Manufactured		No		110	Each	217.0000	4	8			
D2732-030									**				

Rubber Cushion - 3"

DAS
28
9-89

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG		40	
146999		40	
ST410		177	
146999		6	
147721		171	

8

cut (4) at 3.00" per kit													
D3595		Manufactured		No		110	sf	486.5880	0.0833	0.1666			

***D3595*200-300**

Rubber Cushion (\$ Per Ft)

50

DAS
28
9-89

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT052		486.588	
94539		486.588	

144898

DAS
8
9-89

(D3595-200-300) Cut(2) at 2.00" X 3.00" as per dwg
D3595 (per kit)

JUL 20 2016

Picklist Print

July 20, 2016 8:34:14 AM

Page 2

Work Order ID: 149169

149169

Parent Item: DSI 9410-011

DSI 9410-011

Parent Item Name: Amends Installation of D350-591-311/-312 Steps

Start Date: 7/20/2016

Required Date: 7/22/2016

Start Qty: 2.00

Required Qty: 2.00

MS21042L4

Purchased

No

110

Each

1,890.000

8

16

MS21042L4

Locknut

DAS 27 9-89
DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

FP001

51

m133363

51

GA

156

m133769

156

OVER007

1000

m135127

1000

ST3003

116

m134955

116

ST303

550

m127376

12

m134861

38

m135058

500

ST305

17

m130922

17

16

JUL 20 2016

NAS1149D0463J

Purchased

No

110

Each

2,112.000

16

32

NAS1149D0463J

WASHER

DAS 27 9-89
DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

GA

486

M132035

21

M134508

65

M135056

400

ST260a

600

M135056

600

ST263

1026

M134852

26

M134943

1000

6
26

July 20, 2016 8:34:14 AM

Shop Packet Print

Page 2

DART SERVICE INSTRUCTION

TO AMEND DRAWING D350-591 REV. F

REF. CANADIAN STC: SH92-6

FAA STC: SH967NE

TO IMPROVE THE FIT OF THE D350-591-311/-312 STEPS, IT IS ACCEPTABLE TO INSTALL THE DSI 9410-011 KIT. INSTALL THE D2732-030 CUSHION (AFT CROSSTUBE) AND D3595-200-300 CUSHION (FWD CROSSTUBE) AS SHOWN IN FIGURE 1 IN PLACE OF THE D2856-400-720 ABRASION STRIP CALLED OUT ON DRAWING D350-591 REV. F.

FOR CUSTOMERS WHO HAVE PREVIOUSLY INSTALLED D2856-400-720 ABRASION STRIPS REMOVE THE ABRASION STRIPS IN ACCORDANCE WITH ICA-D350-591. PRIOR TO INSTALLING THE DSI 9410-011 KIT.

DSI 9410-011 KITS WILL BE INCLUDED WITH D350-591-311/-312 STEPS AT CHANGE 002 AND SUBSEQUENT.

QTY -041	PART NUMBER	DESCRIPTION
X	DSI 9410-011	STEP MODIFICATION KIT
4	D2732-030	CUSHION
2	D3595-200-300	CUSHION
8	AN4-15A	BOLT
16	AN960JD416	WASHER
8	MS21042L4	NUT (OR MS21042-4)

7/20/16
SA 149169

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01
APPROVED 
BY: D. SHEPHERD (DE # 02)
DATE: 08.09.08
CERT. NO.: SH92-6
ISSUE NO.: 10

B	SHEET 1 DELETE REVISED P/L. (SEPERATE DSI KIT FROM MAIN KIT SEE NCR 08-082 FOR DETAILS)	AJS	08.09.08
A	NEW ISSUE	PH	08.03.27
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	J	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9410	SHEET 1 OF 2
APPROVED	AP	TITLE	SCALE
DE APPR.	HA	STEP MODIFICATION KIT	NTS
DATE	08.09.08	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CORRED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

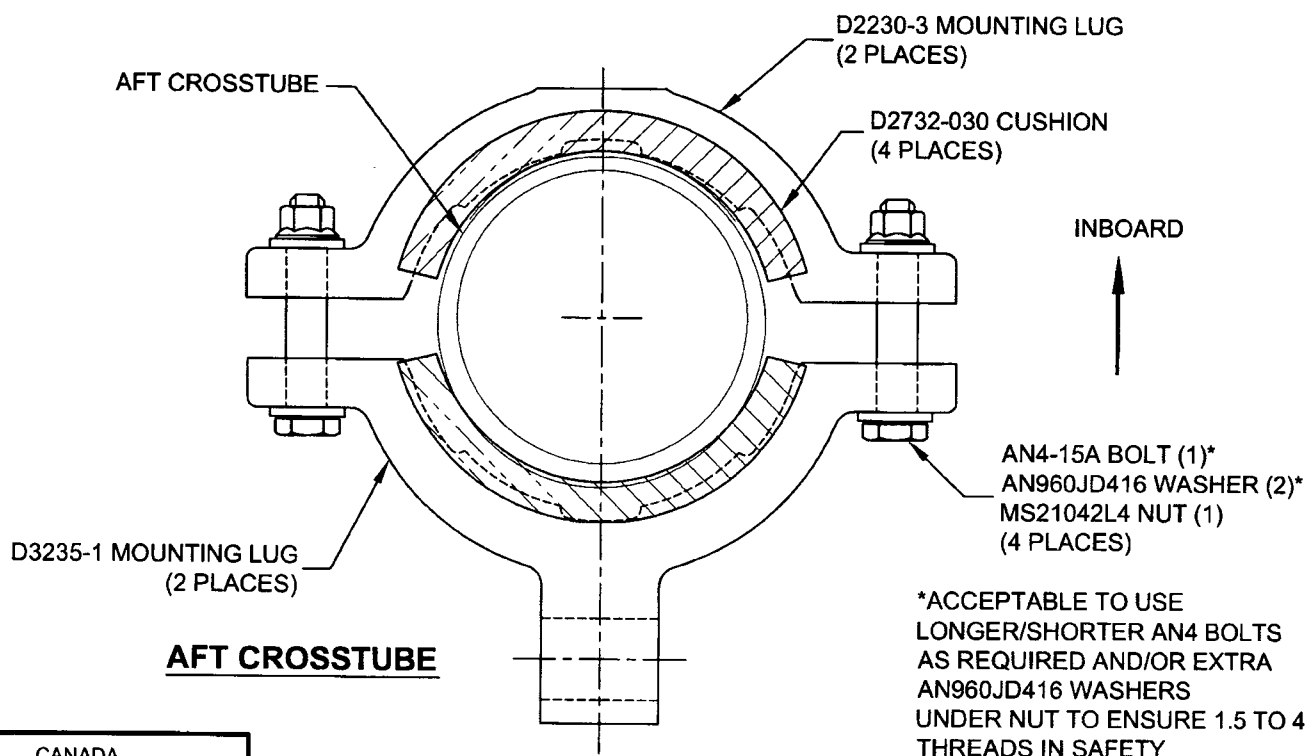
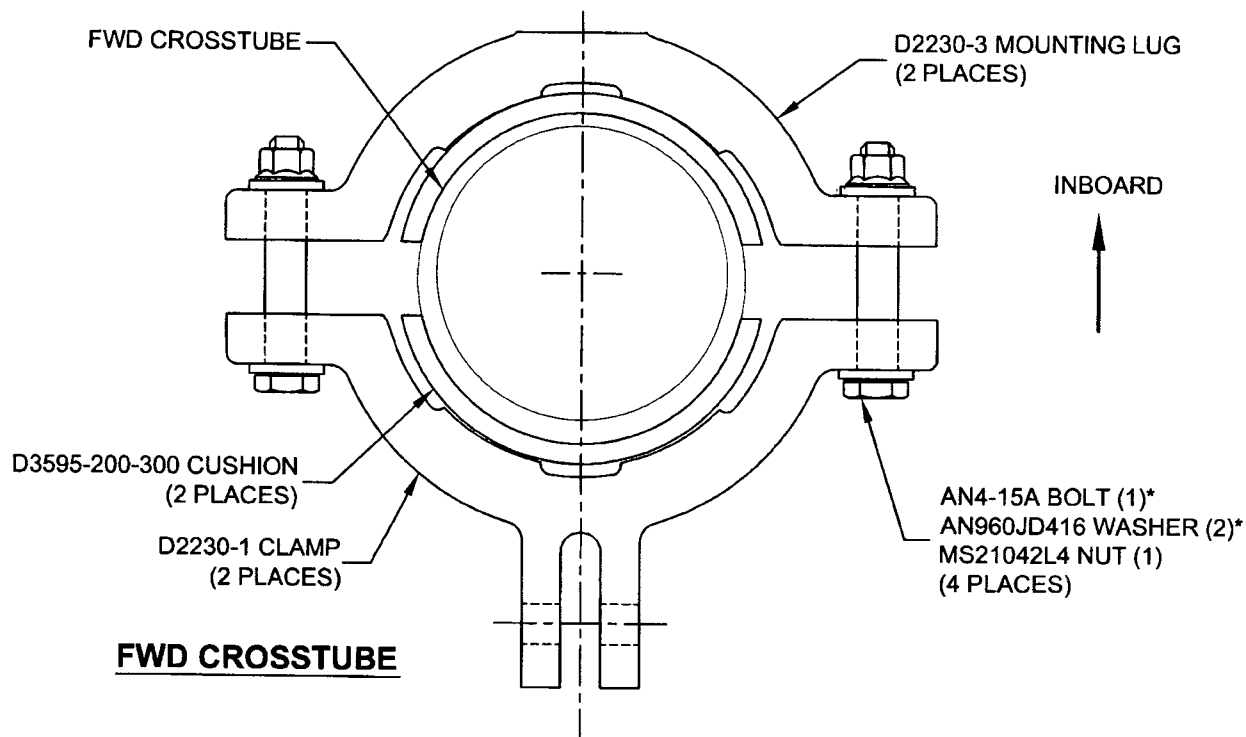


FIGURE 1 - CLAMP/CUSHION INSTALLATION

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
[Signature]
BY: D. SHEPHERD (DE # 02)

DATE: 08.09.08
CERT. NO.: SH92-6
ISSUE NO.: 10

DESIGN	<i>AS</i>	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9410	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STEP MODIFICATION KIT	NTS
DATE	08.09.08	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Work Order ID 149169

July 20, 2016 8:34:09 AM

149169

Page 1

Item ID: DSI 9410-011

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Amends Installation of D350-591-311/-312 Steps

Stop ***NS2***

Start Date: 7/20/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 7/22/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: SWP

Date: 7/20/16

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
DSI 9410	B								
100	Document Control	0.00							

100

DC

Doc.Control -USB or Paperwork

Memo

0.00

Photocopy bluefile & type labels per PPP DSI 9410-011
CHG002

DAS
21
9-89

JUL 20 2016

2

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.01

Quality Control

DART SERVICE INSTRUCTION

TO AMEND DRAWING D350-591 REV. F

REF. CANADIAN STC: SH92-6

FAA STC: SH967NE

DAS
28
9-89

REFERENCE ONLY

TO IMPROVE THE FIT OF THE D350-591-311/-312 STEPS, IT IS ACCEPTABLE TO INSTALL THE DSI 9410-011 KIT. INSTALL THE D2732-030 CUSHION (AFT CROSSTUBE) AND D3595-200-300 CUSHION (FWD CROSSTUBE) AS SHOWN IN FIGURE 1 IN PLACE OF THE D2856-400-720 ABRASION STRIP CALLED OUT ON DRAWING D350-591 REV. F.

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X	DSI 9410-011	STEP MODIFICATION KIT
4	D2732-030	CUSHION
2	D3595-200-300	CUSHION
8	AN4-15A	BOLT
16	AN960JD416	WASHER <i>NA51149 DOWNST</i>
8	MS21042L4	NUT (OR MS21042-4)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

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DRAWN	<i>AJS</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9410	SHEET 1 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STEP MODIFICATION KIT	NTS
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